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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/633,766	08/07/2000	Cary Lee Bates	ROC9-2000-0073	3706

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EXAMINER

D AGOSTA, STEPHEN M

ART UNIT	PAPER NUMBER
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2683

DATE MAILED: 05/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

54

<b>Office Action Summary</b>	<b>Application No.</b> 09/633,766	<b>Applicant(s)</b> BATES ET AL.	
	<b>Examiner</b> Stephen M. D'Agosta	<b>Art Unit</b> 2683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

1. New prior art has been applied and a new rejection is found below.

### *Response to Amendment*

The amendment filed on 4-16-03 under 37 CFR 1.131 has been considered but is ineffective to overcome the Tuoriniemi reference.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 6-7, 9, 12, 16-17 and 19** rejected under 35 U.S.C. 103(a) as being unpatentable over Tuoriniemi et al. U.S. Patent 5,978,689 in view of Dias et al. U.S. Patent 6,122,011 and Schwob US 5,152,012 (hereafter referred to as Tuoriniemi and Dias and Schwob).

As per **claims 1 and 12**, Tuoriniemi teaches a portable communication and audio system supporting a digital satellite radio (DSR) receiver (C13, L3-40) which can receive a plurality of music/news programs/channels and radiotext that identifies music, name of performer, change of program, etc. (C13, L40-57) [eg. A processor that receives a plurality of DSR radio signals on a plurality of channels, each including a radio program and identifying information related to the and outputting audio information corresponding to the program in one of the DSR signals corresponding to the selected channel]. ***The examiner notes that the applicant's specification points much of this out (page 2, L19-22) as does the Xmradio.com website***

Art Unit: 2683

**But is silent on** a display that displays information regarding at least one channel that is not selected wherein the displayed information is derived from the indentifying information for the at least one channel that is not the selected channel.

Dias teaches a television channel map that allows a TV viewer to watch a program and simultaneously display information regarding at least one channel that is not selected along with identifying information (figure 2, "video" is the TV channel currently being viewed and #20 is the channel map of other channels/programs available which are not viewed/selected. Figure 4 shows a similar implementation too). One skilled in the art would adapt this capability of viewing/listening to one channel while being able to see other non-selected channels for radio.

Schwob teaches a radio broadcast receiver (C1, L15-20 and C2, L55-67 and figures 1-3 and C3, L53-68 to C4, L1-13) that has a screen which is "larger than normal" since it has the capacity/size to display many different pieces of information at the same time (ie. Alarm, date, Sleep, Preset Station #, Frequency, Station, City, State and Type of music – ref. figure 3 for these). Hence one skilled in the art would use a similarly sized display combined with the disclosures of Tuoriniemi and Dias. Schwob also discloses this device as being used on a TV receiver as well.

It would have been obvious to one skilled in the art at the time of the invention to modify Tuoriniemi, such that the system displays at least one channel that is not selected, to provide means for a user to simultaneously listen to one station/song while viewing if there is another station/song they prefer to switch to.

As per **claims 6 and 16**, Tuoriniemi teaches claim 1 wherein the display further displays information regarding the selected channel, wherein the displayed information regarding the selected channel is derived from the indentifying information from the selected channel (C13, L52-54 teaches radiotext that is displayed).

As per **claims 7 and 17**, Tuoriniemi teaches claim 1 wherein the displayed information includes a title for the radio program (C13, L52-54 teaches radiotext that identifies music, name of performer, change of program, etc. which encompasses title of radio program).

As per **claims 9 and 19**, Tuoriniemi teaches claim 1 wherein the displayed information includes artist and song title (C13, L52-54 teaches radiotext that identifies music, name of performer, change of program, etc. which encompasses title of radio program).

**Claim 2** rejected under 35 U.S.C. 103(a) as being unpatentable over Tuoriniemi/Dias in view of Shigematsu et al. U.S. Patent 5,416,774 (hereafter referred to as Shigematsu).

As per **claim 2**, Tuoriniemi teaches claim 1 **but is silent on** further comprising memory coupled to the satellite radio processor, the memory containing at least one channel preset.

While a radio receiver is known to have memory presets, **Shigematsu** teaches a digital broadcast receiver (title) that supports DSR (C1, L10-20) with a display that has selection buttons to recall channel presets from memory (figure 7, #52). The examiner notes that Shigematsu teaches a more stationary receiver while a more mobile receiver is taught by Tuoriniemi.

It would have been obvious to one skilled in the art at the time of the invention to modify Tuoriniemi, such that memory contains at least one preset, to provide means for a user to quickly select their preferred stations from all available stations.

**Claims 3-4, 10-11, 13-14 and 20-21** rejected under 35 U.S.C. 103(a) as being unpatentable over Tuoriniemi/Dias/Shigematsu in view of Yuen et al. U.S. Patent 6,239,794 and Liebenow US 6,530,083 and Logan et al. US 6,199,076 (hereafter referred to as Yuen, Liebenow and Logan).

As per **claims 3 and 13**, Tuoriniemi teaches claim 2 **but is silent on** wherein the memory further contains a list of favorite channels, wherein the at least one channel that is not selected is in the list of favorite channels.

~~Yuen teaches a television tuning system and controller that provides memory to store favorite channels (abstract). This teaching along with Dias' teaching in claim 1 would provide motivation for multiple favorite channels in a list wherein the at least one channel is not selected.~~

Liebenow teaches a radio or television receiver wherein the information handling system is a television, convergent television/computer system, **audio receiver**, or video receiver, a user may specify a **list of favorite channels or stations** in his or her user preference profile (C7, L44-50).

It would have been obvious to one skilled in the art at the time of the invention to modify Tuoriniemi, such that the memory contains a favorites list, to provide means for the user to simultaneously listen to a radio program/song and view other programs/songs available which may be among their favorites list.

As per **claims 4 and 14**, Tuoriniemi teaches claim 3 **but is silent on** wherein the list of favorite channels is at least partially defined by the at least one channel preset.

Yuen teaches that memory contains a favorite channel list that includes a list of channel identifiers, each channel identifier corresponding to one of a subset of the set of channels received by the tuner (abstract).

Art Unit: 2683

Liebenow teaches a radio or television receiver wherein the information handling system is a television, convergent television/computer system, **audio receiver**, or video receiver, a user may specify a **list of favorite channels or stations** in his or her user preference profile (C7, L44-50).

It would have been obvious to one skilled in the art at the time of the invention to modify Tuoriniemi, such that the list of favorite channels is at least partially defined by the at least one channel preset, to provide means for one channel preset to bring up a listing of favorites that can be associated with that preset (eg. several JAZZ stations can be viewed based upon selecting that one channel preset button).

As per **claims 10 and 20**, Tuoriniemi teaches a portable communication and audio system supporting a digital satellite radio (DSR)) receiver (C13, L3-40) which can receive a plurality of music/news programs/channels and radiotext that identifies music, name of performer, change of program, etc. (C13, L40-57) [eg. A processor that receives a plurality of DSR radio signals on a plurality of channels, each including a radio program and identifying information related to the and outputting audio information corresponding to the program in one of the DSR signals corresponding to the selected channel]. ***The examiner notes that the applicant's specification points much of this out (page 2, L19-22) as does the Xmradio.com website,***

- Information displayed includes a title for the radio program and time remaining (C13, L52-54 teaches radiotext that identifies music, name of performer, change of program, etc. which encompasses title of radio program).

**But is silent on**

- A display that displays information regarding at least one channel that is not selected wherein the displayed information is derived from the identifying information for the at least one channel that is not the selected channel.

- memory containing at least one preset and a list of favorites wherein the at least one channel that is not selected is in the list of favorites

Dias teaches a television channel map that allows a TV viewer to watch a program and simultaneously display information regarding at least one channel that is not selected along with identifying information (figure 2, "video" is the TV channel currently being viewed and #20 is the channel map of other channels/programs available which are not viewed/selected. Figure 4 shows a similar implementation too). One skilled in the art would adapt this capability of viewing/listening to one channel while being able to see other non-selected channels for radio.

While a radio receiver is known to have memory presets, **Shigematsu** teaches a digital broadcast receiver (title) that supports DSR (C1, L10-20) with a display that has selection buttons to recall channel presets from memory (figure 7, #52). The examiner notes that Shigematsu teaches a more stationary receiver while a more mobile receiver is taught by Tuoriniemi.

Yuen teaches a television tuning system and controller that provides memory to store favorite channels (abstract). ~~This teaching along with Dias' teaching in claim 1 would provide motivation for multiple favorite channels in a list wherein the at least one channel is not selected.~~ Yuen also teaches the memory contains a favorite channel list

Art Unit: 2683

that includes a list of channel identifiers, each channel identifier corresponding to one of a subset of the set of channels received by the tuner (abstract).

Liebenow teaches a radio or television receiver wherein the information handling system is a television, convergent television/computer system, **audio receiver**, or video receiver, a user may specify a **list of favorite channels or stations** in his or her user preference profile (C7, L44-50).

Logan teaches a system that supports radio broadcast programs whereby The scheduled duration of each program segment may be displayed, along with the elapsed time remaining to be played in the currently playing segment, to enable the user to more easily determine when to skip the remainder of the currently playing segment (C1, L10-30 and C12, L35-57).

It would have been obvious to one skilled in the art at the time of the invention to modify Tuoriniemi, such that the display shows at least one channel not selected and is in the favorites list and memory containing one preset which is associated the list of favorites, to provide means for the user to simultaneously listen to a radio program/song and view other programs/songs available and which may be in their favorites list.

As per **claim 11**, Tuoriniemi teaches claim 10 wherein the displayed information includes artist and song title (C13, L52-54 teaches radiotext that identifies music, name of performer, change of program, etc. which encompasses title of radio program).

As per **claim 21**, Tuoriniemi teaches claim 20 **but is silent on** further comprising memory coupled to the satellite radio processor, the memory containing at least one channel preset.

While a radio receiver is known to have memory presets, **Shigematsu** teaches a digital broadcast receiver (title) that supports DSR (C1, L10-20) with a display that has selection buttons to recall channel presets from memory (figure 7, #52). The examiner notes that Shigematsu teaches a more stationary receiver while a more mobile receiver is taught by Tuoriniemi.

It would have been obvious to one skilled in the art at the time of the invention to modify Tuoriniemi, such that memory contains at least one preset, to provide means for a user to quickly select their preferred stations from all available stations.

**Claims 5 and 15** rejected under 35 U.S.C. 103(a) as being unpatentable over Tuoriniemi/Dias/Shigematsu/Yuen in view of Alexander et al. U.S. Patent 6,177,931 (hereafter referred to as Alexander).

As per **claims 5 and 15**, Tuoriniemi teaches claim 3 **but is silent on** wherein the list of favorites is determined by the processor according to which channels are listened to most frequently.

Alexander teaches a viewer profile which is based upon the a person's viewing habits (eg. which shows they watch more frequently than others) and giving them a higher precedence over others in the viewing list AND/OR automatically tuning the TV to that show when it is on (C30, L45-67, see Nick at Night reference).

Art Unit: 2683

It would have been obvious to one skilled in the art at the time of the invention to modify Tuoriniemi, such that the list of favorites is determined by the processor according to channels more frequently listened to, which provides means for the system to customize itself based upon the listening habits of the user.

**Claims 8, 18 and 22** rejected under 35 U.S.C. 103(a) as being unpatentable over Tuoriniemi/Dias in view of Alexander et al. U.S. Patent 6,177,931 and Logan et al. US 6,199,076 (hereafter referred to as Alexander and Logan).

As per **claims 8 and 18**, Tuoriniemi teaches claim 1 **but is silent on** wherein the displayed information includes time remaining for the radio program. Tuoriniemi teaches radiotext that identifies music, name of performer, change of program, etc., where the examiner interprets "etc." to include time remaining).

Dias teaches television channel mapping that shows when a show starts and how long it runs (figure 5, #1254 shows a TV show starting at 6pm which lasts for 30minutes).

Alexander teaches a television display which shows how long a program lasts (figure 1 shows "PRIME TIME LIVE" with start/end times above it). Since one watches TV and shows last for at 30minutes, it is prudent to show start/end times. Radio is not watched and songs are typically much shorter, hence one skilled in the art would more likely choose to show time remaining for the program/song.

Logan teaches a system that supports radio broadcast programs whereby The scheduled duration of each program segment may be displayed, along with the elapsed time remaining to be played in the currently playing segment, to enable the user to more easily determine when to skip the remainder of the currently playing segment (C1, L10-30 and C12, L35-57).

It would have been obvious to one skilled in the art at the time of the invention to modify Tuoriniemi, such that the displayed information includes time remaining, to provide means for the user to decide – based on time remaining - whether to keep listening to the station/song or change the channel.

As per **claim 22**, Tuoriniemi teaches claim 20 **but is silent on** wherein the list of favorites is determined by the processor according to which channels are listened to most frequently.

Alexander teaches a viewer profile which is based upon the a person's viewing habits (eg. which shows they watch more frequently than others) and giving them a higher precedence over others in the viewing list AND/OR automatically tuning the TV to that show when it is on (C30, L45-67, see Nick at Night reference).

It would have been obvious to one skilled in the art at the time of the invention to modify Tuoriniemi, such that the list of favorites is determined by the processor according to channels more frequently listened to, which provides means for the system to customize itself based upon the listening habits of the user.

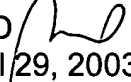


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7493 for regular communications and 703-746-7493 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

SMD   
April 29, 2003

  
WILLIAM TROST  
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